

- 1. A telecommunications system comprising:
- a first base station and a second base station, both capable of communicating by radio with a first terminal unit;

a telecommunications network capable of coupling the first base station to a second terminal unit over a first route and capable of coupling the second base station to the second terminal unit over a second route, whereby traffic data may be communicated between the first terminal unit and the second terminal unit via the first base station or the second base station; and

a routing unit for determining whether the first terminal unit is to communicate with the second terminal unit via the first or second base stations in dependence on factors that include quality of at least part of the first and second routes.

- 2. A telecommunications system as claimed in claim 1, wherein the routing unit is capable of initiating handover of radio communications between the first terminal unit and the base stations from one of the base stations to the other in dependence on factors that include the quality of at least part of the first and second routes.
- 3. A telecommunications system as claimed in claim 1 or 2, wherein the said factors include the quality of at least part of both the first and second routes.
  - 4. A telecommunications system as claimed in claim 3, wherein the routing unit is capable of comparing the quality of the first and second routes and making the determination that the first terminal unit is to communicate with the second terminal unit via the first or second base stations in dependence on that comparison.

5 A telecommunications system as claimed in any preceding claim, wherein the said factors include the quality of radio communications between the first terminal and at least one of the first and second base stations.

6. A telecommunications system as claimed in any preceding claim, comprising quality estimation apparatus for estimating the quality of at least part of the first and second routes and providing an indication of that quality to the routing unit.

- 7. A telecommunications system as claimed in claim 6, wherein the estimation of quality is derived from a communication protocol.
- 8. A telecommunications system as claimed in claim 7, wherein the protocol is RTCP (real-time control protocol).

9. A telecommunications system as claimed in any preceding claim, wherein at least part of the first and second routes is implemented by packet-based communications links.

- 10. A cellular telephony telecommunications system as claimed in any preceding claim.
- 11. A method for determining routing in a telecommunications system comprising: a first base station and a second base station, both capable of communicating by radio with a first terminal unit, and a telecommunications network capable of coupling the first base station to a second terminal unit over a first route and capable of coupling the second base station to the second terminal unit over a second route, whereby traffic data may be communicated between the first terminal unit and the second terminal unit via the first base station or the second base station; the method comprising:

estimating the quality of at least part of the first and second routes; and

determining whether the first terminal unit is to communicate with the second terminal unit via the first or second base stations in dependence on factors that include the said quality.

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